IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RE: United States Patent Application Serial No. 10/757,564

Title: METHOD OF MANUFACTURING A FUEL FILLER TUBE

Applicants: WALTHER, Robert and STOETZEL, Detlef

Filed: January 15, 2004

AFFIDAVIT OF JENNA WILSON
(sworn September 14, 2004)

I, Jenna Wilson, of the City of Toronto, AFFIRM THAT:

1. I am patent counsel for Martinrea International Inc. ("Martinrea"), the employer of both applicants in United States Patent Application No. 10/757,564 at the time the invention described in this patent application was made. Accordingly, I have personal knowledge to the matters to which I hereinafter depose, except where my knowledge is stated to be based upon information and belief.

2. I am advised by Gabriel Pascu, in-house legal counsel for Martinrea, that Martinrea employed both Robert Walther and Detlef Stoetzel, the named inventors of Application No. 10/757,564, at the time the invention described therein (the "Invention") was made. Accordingly, by operation of Ontario law Martinrea is the owner of all right, title, and interest in and to the subject matter of the above-noted patent application.

3. A first patent application in respect of the Invention was filed in Canada on January 17, 2003, and was assigned serial number 2,417,248. U.S. Patent Application No. 10/757,564, claiming priority from this first Canadian application, was filed on January 15, 2004. I am advised by Mr. Pascu and verily believe that Mr. Walther's employment was terminated on July 15, 2003, after the Canadian application was filed but before the U.S. application was filed.

4. I am further advised by Mr. Pascu and verily believe that Mr. Walther provided contact information after his employment at Martinrea was terminated. This last known address was 77 Harbour Square, Unit 1504, Toronto, Ontario, Canada M5J 2S2, and his last known telephone number, a mobile number, was (905) 320 5362.

5. I have made diligent efforts to obtain the signature of Mr. Walther on the needed declaration and power of attorney for U.S. Patent Application No. 10/757,564. On Monday, August 30, 2004, I attempted to reach Mr. Walther by telephone to request that he execute a declaration and power of attorney for the above-noted application. I dialled the mobile number (905) 320 5362, but received an automated message from Rogers Wireless (a mobile telephone company) advising that the number I had dialled was not assigned.

6. Also on that day, I attempted to look up an alternate phone number for Mr. Walther. Marked as Exhibit "A" to my affidavit are the printouts of a number of lookup attempts using Canadian directory services yellowpages.ca and canada411.com on the Internet. None of the entries found matched the information I had concerning Mr. Walther.

7. Also on August 30, 2004, I wrote to Mr. Walther enclosing a copy of a blank combined declaration and power of attorney and a copy of U.S. Patent Application No. 10/757,564. I requested by letter that he execute the declaration and power of attorney and return them to me as soon as possible, or alternatively advise me if he would not sign the document. This letter was sent by registered mail to his last known address, above. Marked as Exhibit "B" to my affidavit is a copy of the contents of the registered mail package and the registered mail receipt.

8. Canada Post's website advises that an attempt to deliver the registered mail package was made on September 1, 2004 but that it was not successful. Marked as Exhibit "C" to my affidavit is a copy of he printout from the Canada Post website, www.canadapost.ca, on September 11, 2004.

9. Filing of the above-noted U.S. patent application without Mr. Walther's signature is necessary to preserve the rights of the parties and to prevent irreparable damage. A response to file the missing parts for this application is due with a three-month extension of time by September 19, 2004. Failure to grant this petition may result in the U.S. Patent and Trademark Office deeming the application abandoned, thus irreparably harming the joint inventor, Mr. Stoetzel, and the owner of the application, Martinrea.

AFFIRMED BEFORE ME at the City of Toronto, in the Province of Ontario, on September 14, 2004.

Commissioner for taking affidavits
Etienne de Villiers
Student-at-law

JENNA WILSON

THIS IS EXHIBIT "A" TO THE AFFIDAVIT OF JENNA WILSON

SWORN SEPTEMBER 15, 2004

Etienne de Villiers
A commissioner, etc.
Student-at-law

WHAT IS CLAIMED IS:

1. A method of manufacturing a fuel filler tube in a hydroforming dye having a cavity of a final configuration of the fuel filler tube, comprising the steps of:

a. cutting a blank to a desired length;

b. forming an intermediate preform having enlarged and constricted portions corresponding to enlarged and constricted portions of the fuel filler tube;

c. bending the intermediate preform if required to fit into the hydroforming dye; and

d. disposing the intermediate preform in the hydroforming dye and injecting the hydroforming fluid under pressure into the intermediate preform, to expand the intermediate preform to the final configuration.

2. The method of claim 1 in which step a. involves the sub-step of cutting a flat blank with wide and narrow portions corresponding to enlarged and constricted portions of the intermediate preform and step b. comprises the sub-step of rolling the flat blank into a tube.

3. The method of claim 2 wherein the blank is formed from a plurality of different materials.

4. The method of claim 1 wherein step d. comprises the sub-step of inserting or retracting a pressurizing member in the hydroforming dye to control the length or wall thickness, or both, of the fuel filler tube.

5. The method of claim 4 wherein the pressurizing member is a nozzle for injecting pressurized fluid during hydroforming.

6. A fuel filler tube produced according to the method of claim 1

ABSTRACT

The present invention provides a method of manufacturing a fuel filler tube that significantly reduces the number of manufacturing steps. In the preferred embodiment, a tubular blank is pre-formed to an intermediate configuration approximating the form of the final fuel filler tube, and then through hydroforming the intermediate tubular preform is formed to final form. The preferred embodiment of the invention uses axial compression for controlling the axial length of the tube and its wall thickness. The method of the invention uses less material than conventional processes, and provides greater control over the parameters of the final product while eliminating many steps of the conventional process.